

What is claimed is:

Sub A1S

5 1. A pressure-sensitive adhesive composition based on (co)polymers of acrylic acid and/or methacrylic acid and/or derivatives thereof which has an at least two-phase domain structure and also an outgassing level of less than 10 µg/g, based on the weight of the composition, when measured by the tesa method.

10 2. The pressure-sensitive adhesive composition as claimed in claim 1, wherein at least some of the (co)polymers are block copolymers of the general type P(A)-P(B)-P(A), where

- P(A) represents a homopolymer or copolymer block of the monomers A, possessing a glass transition temperature of from -80°C to 0°C,
- P(B) represents a homopolymer or copolymer block of the monomers B, possessing a glass transition temperature of from 20°C to 175°C,
- and the homopolymer or copolymer blocks P(A) and the homopolymer or copolymer blocks P(B) are insoluble in one another.

15 3. The pressure-sensitive adhesive composition as claimed in claim 1, wherein at least some of the (co)polymers are block copolymers of the general type P(B)-P(A)-P(B), where

- P(A) represents a homopolymer or copolymer block of the monomers A, possessing a glass transition temperature of from -80°C to 0°C,
- P(B) represents a homopolymer or copolymer block of the monomers B, possessing a glass transition temperature of from 20°C to 175°C,
- and the homopolymer or copolymer blocks P(A) and the homopolymer or copolymer blocks P(B) are insoluble in one another.

20 4. The pressure-sensitive adhesive composition as claimed in either of claims 2 and 3, wherein the monomers A are selected from the group of the acrylates $\text{CH}_2=\text{CHCOOR}$ and/or methacrylates $\text{CH}_2=\text{C}(\text{CH}_3)\text{COOR}$ in which the groups R are alkyl radicals having from 4 to 14 carbon atoms, preferably those having from 4 to 9 carbon atoms.

25 5. The pressure-sensitive adhesive composition as claimed in any of claims 2 to 4, wherein at least some of the monomers A have a functional group R' which is capable of coordinative crosslinking.

100% EPOXY
EPOXY
EPOXY
EPOXY
EPOXY
EPOXY

Sub A2S

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6. The pressure-sensitive adhesive composition as claimed in any of claims 2 to 4, wherein at least some of the monomers A have a functional group Rⁿ which possesses a cohesion-enhancing effect for the homopolymer or copolymer P(A) and/or for the overall block copolymer.
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7. A process for preparing a pressure-sensitive adhesive composition as claimed in at least one of the preceding claims, using a polyacrylate solution obtainable by free-radical polymerization, which comprises a concentration process in which
- ◆ following polymerization, an entrainer is added to the polyacrylate solution,
 - ◆ the polyacrylate solution with the added entrainer is passed into an extruder in which the polyacrylate solution is subjected to a carrier distillation,
 - ◆ as a result of the concentration a polyacrylate composition of a kind is produced which is processed further from the melt
- and the concentrated polyacrylate composition, where appropriate, is applied to a backing material.
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8. The process as claimed in claim 7, wherein, following the concentration, a postpurification is carried out in at least one further step by adding the same or another entrainer to the concentrated polyacrylate composition and conducting a further carrier distillation in the extruder, preferably selecting in each case higher temperatures and lower vacuums than in the preceding distillation step.
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9. The process as claimed in at least one of claims 7 and 8, wherein at least the extruder in the concentration step is a corotating or counterrotating twin screw extruder.
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10. The process as claimed in at least one of claims 7 to 9, wherein steam is used as entrainer.
11. An adhesive tape, particularly for use in the electronics industry, comprising applied to one or both sides of a backing material at least one film of a pressure-sensitive adhesive composition as claimed in at least one of claims 2 to 6.

12. The adhesive tape as claimed in claim 7, wherein said backing material has a very low outgassing tendency, preferably of less than 5 $\mu\text{g/g}$.

add A³